

What Is Claimed Is:

- Sub A7
1. An array substrate for display, comprising:
 - a layer of an insulating substrate, having an area;
 - a thin film transistor array formed on the insulating substrate;
 - a plurality of wiring arranged on the insulating substrate, each wiring having a first end, the wiring in communication with at least one of the transistors in the thin film array;
 - connections pads, each connection pad contacting the first end of at most one of the plurality of wirings;
 - pixel electrodes, and
 - dummy conductive patterns, the dummy patterns situated between the connection pads and the pixel electrodes such that the dummy patterns are not in contact with any of the wiring.
 2. The array substrate for display according to claim 1 wherein the dummy conductive patterns comprise at least about 30% of the area of the insulating substrate.
 3. The array substrate for display according to claim 1 wherein at least one of the wirings comprises at least an upper layer and a lower layer of conductive materials.
 4. The array substrate for display according to claim 3 wherein the lower layer wiring material is selected from the group consisting of aluminum and aluminum alloys.
 5. The array substrate for display according to claim 3 wherein the upper layer wiring material is selected from the group consisting of molybdenum, chromium, tantalum, titanium and alloys thereof.
 6. The array substrate for display according to claim 4 wherein the upper layer wiring

2 material is selected from the group consisting of molybdenum, chromium, tantalum,
3 titanium and alloys thereof.

1 7. The array substrate for display according to claim 6 wherein the upper wiring material
2 is selected from the group consisting of molybdenum and alloys thereof.

1 8. The array substrate for display according to claim 5 wherein the upper layer wiring
2 material is selected such that the upper layer wiring material does not become insoluble in
3 an acid or alkaline etchant.

1 9. The array substrate for display according to claim 6 wherein the upper layer wiring
2 material is selected such that the upper layer wiring material does not become insoluble in
3 an acid or alkaline etchant.

1 10. A method for forming an array substrate for display, comprising:

2 forming a layer of an insulating substrate, having an area;

3 forming a thin film transistor array formed on the insulating substrate;

4 forming a plurality of wiring arranged on the insulating substrate, each wiring
5 having a first end, the wiring in communication with at least one of the transistors in the
6 thin film array;

7 forming connections pads, each connection pad contacting the first end of at most
8 one of the plurality of wirings;

9 forming pixel electrodes, and

10 forming dummy conductive patterns, the dummy patterns situated between the
11 connection pads and the pixel electrodes such that the dummy patters are not in contact
12 with any of the wiring.

1 11. The method for forming an array substrate for display according to claim 10 wherein
2 the dummy conductive patterns comprise at least about 30% of the area of the insulating

3 substrate.

1 12. The method for forming an array substrate for display according to claim 10 wherein
2 at least one of the wirings comprises at least an upper layer and a lower layer of
3 conductive materials.

1 13. The method for forming an array substrate for display according to claim 12 wherein
2 the lower layer wiring material is selected from the group consisting of aluminum and
3 aluminum alloys.

1 14. The method for forming an array substrate for display according to claim 12 wherein
2 the upper layer wiring material is selected from the group consisting of molybdenum,
3 chromium, tantalum, titanium and alloys thereof.

1 15. The method for forming an array substrate for display according to claim 13 wherein
2 the upper layer wiring material is selected from the group consisting of molybdenum,
3 chromium, tantalum, titanium and alloys thereof.

1 16. The method for forming an array substrate for display according to claim 15 wherein
2 the upper wiring material is selected from the group consisting of molybdenum and alloys
3 thereof.

1 17. The method for forming an array substrate for display according to claim 14 wherein
2 the upper layer wiring material is selected such that the upper layer wiring material does
3 not become insoluble in an acid or alkaline etchant.

1 18. The method for forming an array substrate for display according to claim 15 wherein
2 the upper layer wiring material is selected such that the upper layer wiring material does
3 not become insoluble in an acid or alkaline etchant.